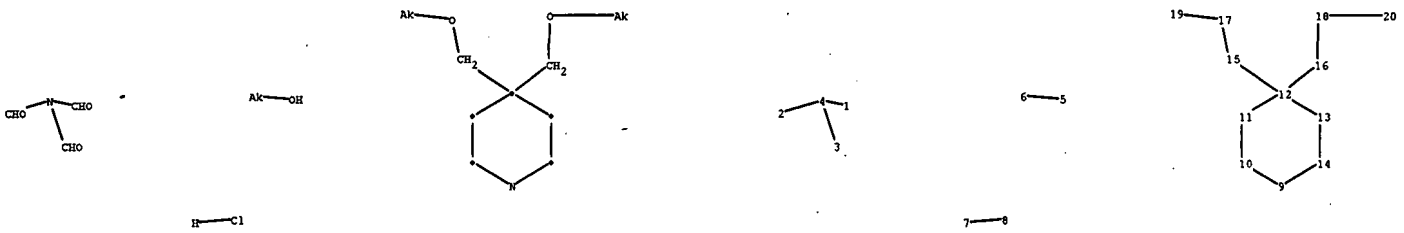
C:\Program Files\Stnexp\Queries\2007 cases\10619436\casreact.str

STN Search
lwl 9/19/07



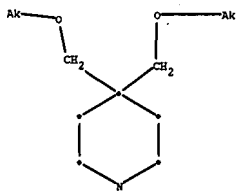
chain nodes :
1 2 3 4 5 6 7 8 15 16 17 18 19 20
ring nodes :
9 10 11 12 13 14
chain bonds :
1-4 2-4 3-4 5-6 7-8 12-15 12-16 15-17 16-18 17-19 18-20
ring bonds :
9-10 9-14 10-11 11-12 12-13 13-14
exact/norm bonds :
1-4 2-4 3-4 5-6 9-10 9-14 10-11 11-12 12-13 13-14 17-19 18-20
exact bonds :
7-8 12-15 12-16 15-17 16-18

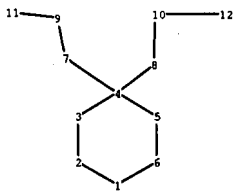
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
fragments assigned product role:
containing 9
fragments assigned reactant/reagent role:
containing 1
containing 5
containing 7

10/619436 Ketals

```
=>
Uploading C:\Program Files\Stnexp\Queries\2007 cases\10619436\casreact.str

L1      STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1              STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 17:14:40 FILE 'CASREACT'
SCREENING COMPLETE -        0 REACTIONS TO VERIFY FROM        0 DOCUMENTS

100.0% DONE       0 VERIFIED       0 HIT RXNS                      0 DOCS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED VERIFICATIONS:         0 TO        0
PROJECTED ANSWERS:               0 TO        0

L2            0 SEA SSS SAM L1 (     0 REACTIONS)

=> s l1 sss full
FULL SEARCH INITIATED 17:14:57 FILE 'CASREACT'
SCREENING COMPLETE -        0 REACTIONS TO VERIFY FROM        0 DOCUMENTS

100.0% DONE       0 VERIFIED       0 HIT RXNS                      0 DOCS
SEARCH TIME: 00.00.01

L3            0 SEA SSS FUL L1 (     0 REACTIONS)
```

C:\Program Files\Stnexp\Queries\2007 cases\10619436\triacetonamine ketal.str





chain nodes :
7 8 9 10 11 12
ring nodes :
1 2 3 4 5 6
chain bonds :
4-7 4-8 7-9 8-10 9-11 10-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 9-11 10-12
exact bonds :
4-7 4-8 7-9 8-10

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS

10/619436 Ketals

```
=>
Uploading C:\Program Files\Stnexp\Queries\2007 cases\10619436\triacetonamine
ketal.str

L5      STRUCTURE UPLOADED

=> d l5
L5 HAS NO ANSWERS
L5              STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.


=> s l5
SAMPLE SEARCH INITIATED 17:19:15 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -       52 TO ITERATE

100.0% PROCESSED       52 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          608 TO     1472
PROJECTED ANSWERS:               0 TO        0

L6            0 SEA SSS SAM L5

=> s l5 sss full
FULL SEARCH INITIATED 17:19:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      971 TO ITERATE

100.0% PROCESSED      971 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L7            0 SEA SSS FUL L5
```

10/619436 Ketals

=> d his

```
     (FILE 'HOME' ENTERED AT 17:13:26 ON 19 SEP 2007)

     FILE 'CASREACT' ENTERED AT 17:14:03 ON 19 SEP 2007
L1              STRUCTURE UPLOADED
L2            0 S L1
L3            0 S L1 SSS FULL

     FILE 'STNGUIDE' ENTERED AT 17:15:51 ON 19 SEP 2007

     FILE 'REGISTRY' ENTERED AT 17:17:18 ON 19 SEP 2007
L4              STRUCTURE UPLOADED

     FILE 'STNGUIDE' ENTERED AT 17:18:26 ON 19 SEP 2007

     FILE 'REGISTRY' ENTERED AT 17:18:46 ON 19 SEP 2007
L5              STRUCTURE UPLOADED
L6            0 S L5
L7            0 S L5 SSS FULL

     FILE 'CAPLUS' ENTERED AT 17:20:09 ON 19 SEP 2007
L8            2 S "TRIACETONAMINE KETAL"

     FILE 'STNGUIDE' ENTERED AT 17:21:15 ON 19 SEP 2007
L9            0 S "HYDROCHLORIC ACID"  (20S) CATALYST
L10           0 S "HYDROGEN CHLORIDE"  (20S) CATALYST
L11           0 S "HYDROCHLORIC ACID"  (P) CATALYST
L12           0 S "HYDROGEN CHLORIDE"  (P) CATALYST
L13           0 S "HYDROGEN CHLORIDE"  (P) "TRIACETONAMINE"
L14           0 S "HYDROGEN CHLORIDE"  (P) GAS
L15           0 S "HYDROGEN CHLORIDE GAS"   OR "GASEOUS HYDROGEN CHLORIDE"

     FILE 'HCAPLUS' ENTERED AT 17:30:35 ON 19 SEP 2007
L16        1091 S "HYDROGEN CHLORIDE GAS"   OR "GASEOUS HYDROGEN CHLORIDE"
L17           0 S L16 (P) TRIACETONAMINE
L18           1 S "HYDROGEN CHLORIDE"  (P) "TRIACETONAMINE"
```

```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:SSPTAMLL1621

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  JUL 02  LMEDLINE coverage updated
 NEWS  3  JUL 02  SCISEARCH enhanced with complete author names
 NEWS  4  JUL 02  CHEMCATS accession numbers revised
 NEWS  5  JUL 02  CA/CAplus enhanced with utility model patents from China
 NEWS  6  JUL 16  CAplus enhanced with French and German abstracts
 NEWS  7  JUL 18  CA/CAplus patent coverage enhanced
 NEWS  8  JUL 26  USPATFULL/USPAT2 enhanced with IPC reclassification
 NEWS  9  JUL 30  USGENE now available on STN
 NEWS 10  AUG 06  CAS REGISTRY enhanced with new experimental property tags
 NEWS 11  AUG 06  BEILSTEIN updated with new compounds
 NEWS 12  AUG 06  FSTA enhanced with new thesaurus edition
 NEWS 13  AUG 13  CA/CAplus enhanced with additional kind codes for granted
                  patents
 NEWS 14  AUG 20  CA/CAplus enhanced with CAS indexing in pre-1907 records
 NEWS 15  AUG 27  Full-text patent databases enhanced with predefined
                  patent family display formats from INPADOCDB
 NEWS 16  AUG 27  USPATOLD now available on STN
 NEWS 17  AUG 28  CAS REGISTRY enhanced with additional experimental
                  spectral property data
 NEWS 18  SEP 07  STN AnaVist, Version 2.0, now available with Derwent
                  World Patents Index
 NEWS 19  SEP 13  FORIS renamed to SOFIS
 NEWS 20  SEP 13  INPADOCDB enhanced with monthly SDI frequency
 NEWS 21  SEP 17  CA/CAplus enhanced with printed CA page images from
                  1967-1998
 NEWS 22  SEP 17  CAplus coverage extended to include traditional medicine
                  patents

 NEWS EXPRESS  19 SEPTEMBER 2007:  CURRENT WINDOWS VERSION IS V8.2,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 17:13:26 ON 19 SEP 2007

=> file casreact
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'CASREACT' ENTERED AT 17:14:03 ON 19 SEP 2007
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26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 15 Sep 2007 VOL 147 ISS 13

New CAS Information Use Policies, enter HELP USAGETERMS for details.

**********************************************************
*                                                        *
*     CASREACT now has more than 12 million reactions    *
*                                                        *
**********************************************************

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999)
provided by InfoChem, INPI data prior to 1986, and Biotransformations
database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

=>
Uploading C:\Program Files\Stnexp\Queries\2007cases\10619436\casreact.str

L1        STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1                STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 17:14:40 FILE 'CASREACT'
SCREENING COMPLETE -          0 REACTIONS TO VERIFY FROM         0 DOCUMENTS

100.0% DONE        0 VERIFIED        0 HIT RXNS                        0 DOCS
SEARCH TIME: 00.00.01
```

```
FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED VERIFICATIONS:          0 TO        0
PROJECTED ANSWERS:                0 TO        0

L2            0 SEA SSS SAM L1 (      0 REACTIONS)

=> s l1 sss full
FULL SEARCH INITIATED 17:14:57 FILE 'CASREACT'
SCREENING COMPLETE -         0 REACTIONS TO VERIFY FROM         0 DOCUMENTS

100.0% DONE       0 VERIFIED       0 HIT RXNS                        0 DOCS
SEARCH TIME: 00.00.01

L3            0 SEA SSS FUL L1 (      0 REACTIONS)

=> file stng
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   114.45     114.66

FILE 'STNGUIDE' ENTERED AT 17:15:51 ON 19 SEP 2007
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 14, 2007 (20070914/UP).

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.12     114.78

FILE 'REGISTRY' ENTERED AT 17:17:18 ON 19 SEP 2007
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   18 SEP 2007  HIGHEST RN 947490-11-1
DICTIONARY FILE UPDATES:  18 SEP 2007  HIGHEST RN 947490-11-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html
```



```
=>
Uploading C:\Program Files\Stnexp\Queries\2007cases\10619436\triacetonamine
ketal.str

L4       STRUCTURE UPLOADED

=> d l4
L4 HAS NO ANSWERS
L4              STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.


=> file stng
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.90     115.68

FILE 'STNGUIDE' ENTERED AT 17:18:26 ON 19 SEP 2007
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 14, 2007 (20070914/UP).

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files.  For example, the EXPAND
command can only be used to look at the index in a file which has an
index.  Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.06     115.74

FILE 'REGISTRY' ENTERED AT 17:18:46 ON 19 SEP 2007
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   18 SEP 2007  HIGHEST RN 947490-11-1
DICTIONARY FILE UPDATES:  18 SEP 2007  HIGHEST RN 947490-11-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007
```

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\2007cases\10619436\triacetonamine ketal.str

L5 STRUCTURE UPLOADED

=> d l5
L5 HAS NO ANSWERS
L5 STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l5
SAMPLE SEARCH INITIATED 17:19:15 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 52 TO ITERATE

100.0% PROCESSED 52 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 608 TO 1472
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s l5 sss full
FULL SEARCH INITIATED 17:19:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 971 TO ITERATE

100.0% PROCESSED 971 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L5

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 172.55 288.29

FILE 'CAPLUS' ENTERED AT 17:20:09 ON 19 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 19 Sep 2007 VOL 147 ISS 13
FILE LAST UPDATED: 18 Sep 2007 (20070918/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

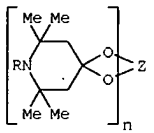
=> s "triacetonamine ketal"
260 "TRIACETONAMINE"
2 "TRIACETONAMINES"
261 "TRIACETONAMINE"
("TRIACETONAMINE" OR "TRIACETONAMINES")
10060 "KETAL"
4318 "KETALS"
12133 "KETAL"
("KETAL" OR "KETALS")
L8 2 "TRIACETONAMINE KETAL"
("TRIACETONAMINE"(W)"KETAL")

=> d l8 1-2 ibib abs

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:504945 CAPLUS
DOCUMENT NUMBER: 103:104945
TITLE: Triacetonamine sugar alcohol ketals
PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60045583	A	19850312	JP 1983-153437	19830823
PRIORITY APPLN. INFO.:			JP 1983-153437	19830823

GI



I

AB Light-degradable organic materials can be stabilized by title compds. I (R = H, alkyl, alkanoyl; Z = sugar alc. moiety; n = 1, 2). Thus, refluxing 20.0 g xylitol and 33.0 g triacetonamine·H2SO4 gave a monoketal (I; R = H, Z = xylitol residue, n = 1) (II). Press-molded sheets prepared from polypropylene 100, stearyl β-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate 0.2, and II 0.3 parts had Hg lamp stability 640 h, vs. 150 h using 8-aza-7,7,9,9-tetramethyl-1,4-dioxaspiro[4.5]decane.

L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1974:27899 CAPLUS
DOCUMENT NUMBER: 80:27899
TITLE: Triacetonamine ketal stabilizers
INVENTOR(S): Murayama, Keisuke; Toda, Toshimasa; Mori, Eiko; Matsui, Katsuaki; Kurumada, Tomoyuki; Ohta, Noriyuki; Watanabe, Ichiro
PATENT ASSIGNEE(S): Sankyo Co., Ltd.
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2203533	A1	19730816	DE 1972-2203533	19720121
PRIORITY APPLN. INFO.:			DE 1972-2203533 A	19720121

AB The ketals I [R = R1 = Bu or n-C8H17, RR1 = o-phenylene (II) or CH2CH2] were prepared by ketalization of triacetonamine (III) and used as heat and light stabilizers in polymers, e.g. polypropylene (IV) [9003-07-0], nylon 6 [25038-54-4], or polyurethanes. Thus, refluxing III and o-(HO)2C6H4 in C6H6 containing p-MeC6H4SO3H gave 2,2,6,6-tetramethyl-4,4-(o-phenylenedioxy)piperidine (II) [36793-29-0]. Samples from 100 parts IV and 0.25 part II turned brittle (on heating at 45.deg. under uv irradiation) after 1000 hr vs. 100 hr for IV containing no II.

=> fil stng
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	10.62	298.91
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.56	-1.56

FILE 'STNGUIDE' ENTERED AT 17:21:15 ON 19 SEP 2007
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 14, 2007 (20070914/UP).

=> d his

(FILE 'HOME' ENTERED AT 17:13:26 ON 19 SEP 2007)

FILE 'CASREACT' ENTERED AT 17:14:03 ON 19 SEP 2007
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 S L1 SSS FULL

FILE 'STNGUIDE' ENTERED AT 17:15:51 ON 19 SEP 2007

FILE 'REGISTRY' ENTERED AT 17:17:18 ON 19 SEP 2007
L4 STRUCTURE UPLOADED

FILE 'STNGUIDE' ENTERED AT 17:18:26 ON 19 SEP 2007

FILE 'REGISTRY' ENTERED AT 17:18:46 ON 19 SEP 2007
L5 STRUCTURE UPLOADED
L6 0 S L5
L7 0 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 17:20:09 ON 19 SEP 2007
L8 2 S "TRIACETONAMINE KETAL"

FILE 'STNGUIDE' ENTERED AT 17:21:15 ON 19 SEP 2007

=> s "hydrochloric acid" (20s) catalyst
0 "HYDROCHLORIC"
7 "ACID"
1 "ACIDS"
7 "ACID" ("ACID" OR "ACIDS")
0 "HYDROCHLORIC ACID" ("HYDROCHLORIC"(W)"ACID")
7 CATALYST
6 CATALYSTS
8 CATALYST (CATALYST OR CATALYSTS)
L9 0 "HYDROCHLORIC ACID" (20S) CATALYST

=> s "hydrogen chloride" (20s) catalyst
4 "HYDROGEN"
0 "CHLORIDE"
0 "HYDROGEN CHLORIDE" ("HYDROGEN"(W)"CHLORIDE")
7 CATALYST
6 CATALYSTS
8 CATALYST (CATALYST OR CATALYSTS)
L10 0 "HYDROGEN CHLORIDE" (20S) CATALYST

=> s "hydrochloric acid" (p) catalyst
0 "HYDROCHLORIC"

```
             7 "ACID"
             1 "ACIDS"
             7 "ACID"
                (("ACID" OR "ACIDS"))
             0 "HYDROCHLORIC ACID"
                ("HYDROCHLORIC"(W)"ACID")
             7 CATALYST
             6 CATALYSTS
             8 CATALYST
                (CATALYST OR CATALYSTS)
L11          0 "HYDROCHLORIC ACID"  (P) CATALYST

=> s "hydrogen chloride"  (p) catalyst
             4 "HYDROGEN"
             0 "CHLORIDE"
             0 "HYDROGEN CHLORIDE"
                ("HYDROGEN"(W)"CHLORIDE")
             7 CATALYST
             6 CATALYSTS
             8 CATALYST
                (CATALYST OR CATALYSTS)
L12          0 "HYDROGEN CHLORIDE"  (P) CATALYST

=> s "hydrogen chloride"  (p) "triacetonamine"
             4 "HYDROGEN"
             0 "CHLORIDE"
             0 "HYDROGEN CHLORIDE"
                ("HYDROGEN"(W)"CHLORIDE")
             0 "TRIACETONAMINE"
L13          0 "HYDROGEN CHLORIDE"  (P) "TRIACETONAMINE"

=> s "hydrogen chloride"  (p) gas
             4 "HYDROGEN"
             0 "CHLORIDE"
             0 "HYDROGEN CHLORIDE"
                ("HYDROGEN"(W)"CHLORIDE")
             8 GAS
             3 GASES
            10 GAS.
                (GAS OR GASES)
L14          0 "HYDROGEN CHLORIDE"  (P) GAS

=> s "hydrogen chloride gas"   or "gaseous hydrogen chloride"
             4 "HYDROGEN"
             0 "CHLORIDE"
             8 "GAS"
             3 "GASES"
            10 "GAS"
                (("GAS" OR "GASES"))
             0 "HYDROGEN CHLORIDE GAS"
                ("HYDROGEN"(W)"CHLORIDE"(W)"GAS")
             0 "GASEOUS"
             4 "HYDROGEN"
             0 "CHLORIDE"
             0 "GASEOUS HYDROGEN CHLORIDE"
                ("GASEOUS"(W)"HYDROGEN"(W)"CHLORIDE")
L15          0 "HYDROGEN CHLORIDE GAS"   OR "GASEOUS HYDROGEN CHLORIDE"
```



```
=>  d his

     (FILE 'HOME' ENTERED AT 17:13:26 ON 19 SEP 2007)

     FILE 'CASREACT' ENTERED AT 17:14:03 ON 19 SEP 2007
L1               STRUCTURE UPLOADED
L2           0 S L1
L3           0 S L1 SSS FULL

     FILE 'STNGUIDE' ENTERED AT 17:15:51 ON 19 SEP 2007

     FILE 'REGISTRY' ENTERED AT 17:17:18 ON 19 SEP 2007
L4               STRUCTURE UPLOADED

     FILE 'STNGUIDE' ENTERED AT 17:18:26 ON 19 SEP 2007

     FILE 'REGISTRY' ENTERED AT 17:18:46 ON 19 SEP 2007
L5               STRUCTURE UPLOADED
L6           0 S L5
L7           0 S L5 SSS FULL

     FILE 'CAPLUS' ENTERED AT 17:20:09 ON 19 SEP 2007
L8           2 S "TRIACETONAMINE KETAL"

     FILE 'STNGUIDE' ENTERED AT 17:21:15 ON 19 SEP 2007
L9           0 S "HYDROCHLORIC ACID"  (20S) CATALYST
L10          0 S "HYDROGEN CHLORIDE"  (20S) CATALYST
L11          0 S "HYDROCHLORIC ACID"  (P) CATALYST
L12          0 S "HYDROGEN CHLORIDE"  (P) CATALYST
L13          0 S "HYDROGEN CHLORIDE"  (P) "TRIACETONAMINE"
L14          0 S "HYDROGEN CHLORIDE"  (P) GAS
L15          0 S "HYDROGEN CHLORIDE GAS"   OR "GASEOUS HYDROGEN CHLORIDE"

=> file hcapl
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.96     299.87

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00      -1.56

FILE 'HCAPLUS' ENTERED AT 17:30:35 ON 19 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 19 Sep 2007  VOL 147 ISS 13
FILE LAST UPDATED: 18 Sep 2007  (20070918/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s "hydrogen chloride gas"   or "gaseous hydrogen chloride"
       1015422 "HYDROGEN"
          6041 "HYDROGENS"
       1018782 "HYDROGEN"
                 ("HYDROGEN" OR "HYDROGENS")
       1161611 "CHLORIDE"
        159679 "CHLORIDES"
       1235117 "CHLORIDE"
                 ("CHLORIDE" OR "CHLORIDES")
       1609761 "GAS"
        534142 "GASES"
       1797109 "GAS"
                 ("GAS" OR "GASES")
           716 "HYDROGEN CHLORIDE GAS"
                 ("HYDROGEN"(W)"CHLORIDE"(W)"GAS")
        174183 "GASEOUS"
       1015422 "HYDROGEN"
          6041 "HYDROGENS"
       1018782 "HYDROGEN"
                 ("HYDROGEN" OR "HYDROGENS")
       1161611 "CHLORIDE"
        159679 "CHLORIDES"
       1235117 "CHLORIDE"
                 ("CHLORIDE" OR "CHLORIDES")
           407 "GASEOUS HYDROGEN CHLORIDE"
                 ("GASEOUS"(W)"HYDROGEN"(W)"CHLORIDE")
L16       1091 "HYDROGEN CHLORIDE GAS"   OR "GASEOUS HYDROGEN CHLORIDE"

=> l16 (P) triacetonamine
L16 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l16 (P) triacetonamine
           260 TRIACETONAMINE
             2 TRIACETONAMINES
           261 TRIACETONAMINE
                 (TRIACETONAMINE OR TRIACETONAMINES)
L17          0 L16 (P) TRIACETONAMINE

=> s "hydrogen chloride"  (p) "triacetonamine"
       1015422 "HYDROGEN"
          6041 "HYDROGENS"
       1018782 "HYDROGEN"
                 ("HYDROGEN" OR "HYDROGENS")
       1161611 "CHLORIDE"
        159679 "CHLORIDES"
       1235117 "CHLORIDE"
                 ("CHLORIDE" OR "CHLORIDES")
```



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         33237 "HYDROGEN CHLORIDE"
                 ("HYDROGEN"(W)"CHLORIDE")
           260 "TRIACETONAMINE"
             2 "TRIACETONAMINES"
           261 "TRIACETONAMINE"
                 ("TRIACETONAMINE" OR "TRIACETONAMINES")
L18          1 "HYDROGEN CHLORIDE"  (P) "TRIACETONAMINE"

=> d l18 ibib abs

L18  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1906:88385  HCAPLUS
DOCUMENT NUMBER:          0:88385
TITLE:                    The oximes of the cyclic acetone bases:
                          paramidotrimethylpiperidine
AUTHOR(S):                Harries, Carl D.
SOURCE:                   Berichte der Deutschen Chemischen Gesellschaft (1896),
                          29, 521-9
                          From: J. Chem. Soc., Abstr. 70, I, 317-8 1896
                          CODEN: BDCGAS
DOCUMENT TYPE:            Journal
LANGUAGE:                 Unavailable
AB   Triacetonaminoxime, C9H18N2O, is obtained by the action of hydroxylamine
     on triacetonamine, and crystallises in large, white, six-sided
     prisms, melting at 152-153°; it forms crystalline salts with
     hydrochloric and sulphuric acids.  Benzylidenediacetonaminoxime,
     C13H18N2O, crystallises in lustrous, four-sided tablets, melting at
     140-141°, and is only sparingly soluble in boiling water.
     Vinyldiacetonaminoxime, (the original abstract includes an equation),
     crystallises in translucent, four-sided tablets, melting at
     150-151°.  When reduced with alcoholic hydrogen
     chloride, zinc dust, and a little water, it is converted into
     4-amido-2:2:6-trimethylpiperidine,which forms a crystalline mass, melts
     at 25-26°, and boils at 60° (pressure = 7.5 mm.).  The base
     has a faint odour of piperidine, and rapidly combines with the carbonic
     anhydride of the air, forming a carbamate.  The hydriodide of the base
     crystallises in fascicular groups of white prisms, and is moderately
     soluble in water; the hydrochloride is readily soluble in water; the
     aurochloride crystallises in red, oblique, six-sided tablets, and is
     sparingly soluble in water, whilst the platinochloride and picrate are
     also crystalline.  The base forms both a normal and an acid oxalate, the
     latter being very hygroscopic.  4-Acetamido-2:2:6-trimethylpiperidine
     crystallises in cubes, melting at 206-207°; it is strongly basic,
     and forms an aurochloride, melting at 235° with decomposition.  The
     diacetyl compound, (the original abstract includes an equation), is formed
     when the base is heated with excess of acetic anhydride at 160°; it
     forms small prisms, melts at 88-89°, boils at 160-170°
     (pressure = 8 mm.), and has basic properties, forming a crystalline
     aurochloride.  This diacetyl compound is accompanied by another basic
     substance, which boils at about 200° (pressure = 8 mm.), and is
     probably an anhydro-derivative.  The base does not yield a diazo-compound
     with sodium nitrite and an acid, whilst with amylic nitrite it yields a
     nitroso-derivative, the imido-group having taken part in the reaction.
     When heated with chloroform and alcoholic potash, no carbylamine
     derivative is produced.  The base reacts with carbon bisulphide, forming a
     thiocarbamate, C9H18N2S2, which crystallises from water in prisms and
     melts at 187-188°.  When this salt is treated with mercuric
     chloride, it yields the hydrochloride of a new base.  The latter
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crystallises in small prisms and melts at 79-80°. It has not the smell or other properties of a thiocarbimide, and probably has the constitution (the original abstract includes an equation).

=> d his

(FILE 'HOME' ENTERED AT 17:13:26 ON 19 SEP 2007)

FILE 'CASREACT' ENTERED AT 17:14:03 ON 19 SEP 2007
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 0 S L1 SSS FULL

FILE 'STNGUIDE' ENTERED AT 17:15:51 ON 19 SEP 2007

FILE 'REGISTRY' ENTERED AT 17:17:18 ON 19 SEP 2007
L4 STRUCTURE UPLOADED

FILE 'STNGUIDE' ENTERED AT 17:18:26 ON 19 SEP 2007

FILE 'REGISTRY' ENTERED AT 17:18:46 ON 19 SEP 2007
L5 STRUCTURE UPLOADED
L6 0 S L5
L7 0 S L5 SSS FULL

FILE 'CAPLUS' ENTERED AT 17:20:09 ON 19 SEP 2007
L8 2 S "TRIACETONAMINE KETAL"

FILE 'STNGUIDE' ENTERED AT 17:21:15 ON 19 SEP 2007
L9 0 S "HYDROCHLORIC ACID" (20S) CATALYST
L10 0 S "HYDROGEN CHLORIDE" (20S) CATALYST
L11 0 S "HYDROCHLORIC ACID" (P) CATALYST
L12 0 S "HYDROGEN CHLORIDE" (P) CATALYST
L13 0 S "HYDROGEN CHLORIDE" (P) "TRIACETONAMINE"
L14 0 S "HYDROGEN CHLORIDE" (P) GAS
L15 0 S "HYDROGEN CHLORIDE GAS" OR "GASEOUS HYDROGEN CHLORIDE"

FILE 'HCAPLUS' ENTERED AT 17:30:35 ON 19 SEP 2007
L16 1091 S "HYDROGEN CHLORIDE GAS" OR "GASEOUS HYDROGEN CHLORIDE"
L17 0 S L16 (P) TRIACETONAMINE
L18 1 S "HYDROGEN CHLORIDE" (P) "TRIACETONAMINE"

=> fil stng

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	15.83	315.70
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.78	-2.34

FILE 'STNGUIDE' ENTERED AT 17:33:44 ON 19 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Sep 14, 2007 (20070914/UP).

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	271	"564/502".CCLS.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/19 16:18
L2	513	"544/406".CCLS.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/19 16:18
L3	794	L1 same20 L2	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/19 16:18
L4	125	triacetonamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:19
L5	12	ketals same L4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:19
L6	125	triacetonamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:37
L7	2	("3959298").URPN.	USPAT	OR	ON	2007/09/19 16:23
L8	1	("4734502").URPN.	USPAT	OR	ON	2007/09/19 16:23
L9	0	("4831146").URPN.	USPAT	OR	ON	2007/09/19 16:23
L10	7	triacetonami$3 near3 ketal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:34
L11	201185	((hydrogen chloride) or (hydrochlor$4 near3 acid)) near3 (gas or air or vapor)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:36
L12	201301	l11 same20 l4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:36
L13	0	l11 same20 l4	US-PGPUB; USPAT; EPO; JPO; DERWENT	AND	ON	2007/09/19 16:36
L14	2	l11 near20 l4	US-PGPUB; USPAT; EPO; JPO; DERWENT	AND	ON	2007/09/19 16:36

EAST Search History

L15	0	triacetonamine.clm. and ketal.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:40
L16	0	triacetonamine.clm. and ketal.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	ADJ	ON	2007/09/19 16:39
L17	156	l11 and ketal.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	ADJ	ON	2007/09/19 16:39
L18	0	l17 and l6	US-PGPUB; USPAT; EPO; JPO; DERWENT	ADJ	ON	2007/09/19 16:39
L19	2353	triacetonamine.clm. or ketal.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:40
L20	158	l11 and l19	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:48
L21	189	ketal$10 near10 (triacetonamine or piperidone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:49
L22	189	(ketal$10) near10 (triacetonamine or piperidone)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:57
L23	186	(ketal$10) near10 piperidone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:53
L24	8	(ketal$10) near10 triacetonamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/09/19 16:57
S1	3	(("3963730") or ("4250312") or ("3940401")).PN.	US-PGPUB; USPAT	OR	OFF	2006/12/05 20:29
S2	269	"564/502".CCLS.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/19 16:18
S3	459	"544/406".CCLS.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/05 18:00

EAST Search History

S4	25	((OLIVER) near2 (MEYER)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/05 18:00
S5	26	((OLIVER) near2 (MEYER)).INV.	EPO; JPO; DERWENT	OR	ON	2006/12/05 18:00
S6	1	((RENATE) near2 (UHLENBERG)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/05 18:02
S7	0	((RENATE) near2 (UHLENBERG)).INV.	EPO; JPO; DERWENT	OR	ON	2006/12/05 18:02
S8	4	((MICHAEL) near2 (KORELL)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2006/12/05 18:02
S9	7	((MICHAEL) near2 (KORELL)).INV.	EPO; JPO; DERWENT	OR	ON	2006/12/05 18:03
S10	4	("4250312").URPN.	USPAT	OR	ON	2006/12/05 18:23
S11	0	("4900833").URPN.	USPAT	OR	ON	2006/12/05 18:28
S12	4	("4250312").URPN.	USPAT	OR	ON	2006/12/05 20:28
S13	125	triacetonamine	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:55
S15	12	ketal$ same S13	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:30
S16	791	hydroxyl adj derivative	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:49
S17	2	S13 same S16	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:38
S18	24509	ketal$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:39
S19	12	S13 same S18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:40
S20	4	glycerol near5 acid adj catalysis	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:45

EAST Search History

S21	717	glycerol near5 ketone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:45
S22	29	S21 same catalys$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:46
S23	27	S16 same ketone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:50
S24	9	S16 near5 ketone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:50
S25	59471	hydrogen adj chloride	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:55
S26	7	S13 and S18 and S25	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:57
S27	24	S13 and S18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:10
S28	2933	S18 and S25	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:58
S29	7	S27 and S28	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 20:58
S30	45181	hydrocarbon adj solv$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:11
S31	10587	alkali$ adj metal adj alkoxi$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:12
S32	1317	alkali$ adj earth adj metal adj alkoxi$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:12

EAST Search History

S33	0	S13 same S30	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:21
S34	0	S13 near S30	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:21
S35	86	S18 same S30	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/12/05 21:22
S36	41	("3862100").URPN.	USPAT	OR	ON	2006/12/05 21:43
S39	1	JP-48055938-$.did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/01/30 12:11
S40	1	("3839273").PN.	US-PGPUB; USPAT	OR	OFF	2007/01/30 12:11
S41	9	("3839273").URPN.	USPAT	OR	ON	2007/01/30 12:14